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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,034	02/15/2001	Yoshihiro Ishikawa	15689.65	1987
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EXAMINER				
SAM, PHIRIN				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/763,034

Applicant(s)

ISHIKAWA ET AL.

Examiner

PHIRIN SAM

Art Unit

2419

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22 and 31-33 is/are allowed.
- 6) ☒ Claim(s) 21 and 23-29 is/are rejected.
- 7) ☒ Claim(s) 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-884)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Page No(s)/Mail Date 07/03/08.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,128,288 (hereinafter referred as "Miya") in view of US Patent 6,373,434 (hereinafter referred as "Hayakawa").

Regarding claims 21 and 23, Miya discloses an information management method for cell search in a mobile communications system comprising:

- (a) a capturing step of capturing, in a handover-source base station, phase difference information between a long period spreading code of a common control channel from said handover-source base station and a long period spreading code of a common control channel from a handover-destination base station (see Figs. 4 and 13, col. 4, lines 46-65, and col. 9, lines

59-67), the phase difference information being calculated by at least one mobile station that is communicating with said handover-source base station (see Fig. 4, col. 5, lines 6-29);

(b) a storing step of storing, in said handover- source base station and/or its control station, the captured phase difference information (see Fig. 1, element 6, col. 3, lines 46-54);

Miya does not disclose a transmitting step of transmitting the stored phase difference information to a mobile station. However, Hayakawa disclose a transmitting step of transmitting the stored phase difference information to a mobile station (see Fig. 1, col. 4, lines 23-25, wherein element 13 spreads the phase difference 1 to mobile station 20). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine transmitting the stored phase difference information to a mobile station teaching by Hayakawa with Miya. The motivation for doing so would have been to provide to detect the distance with high reliability performance read on column 2, lines 1-2. Therefore, it would have been obvious to combine Hayakawa and Miya to obtain the invention as specified in the claims 21 and 23.

4. Claims 24, 25, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,373,434 (hereinafter referred as “Hayakawa”) in view of US Patent 6,738,411 (hereinafter referred as “Ogawa”).

Regarding claims 24, 25, and 29, Hayakawa discloses a cell search method of a mobile station comprising:

(a) a receiving capturing step of receiving from a base station, phase difference information between a long period spreading code of a common control channel of said base station (see Figs. 1, 2, co. 5, lines 63-67, col. 7, lines 14-17);

Hayakawa does not disclose a cell search step of carrying out cell search in accordance with the received phase difference information and a neighboring base station. However, Ogawa

discloses a cell search step of carrying out cell search in accordance with the received phase difference information and a neighboring base station (see Figs. 7, 8, and 11, col. 11, lines 10-21, 35-55, and col. 14, lines 50-63). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine carrying out cell search in accordance with the received phase difference information and a neighboring base station teaching by Ogawa with Hayakawa. The motivation for doing so would have been to provide to reduce circuit scale and reduce power dissipation while maintaining a reduced cross-correlation read on column 3, lines 47-48. Therefore, it would have been obvious to combine Ogawa and Hayakawa to obtain the invention as specified in the claims 24, 25, and 29.

5. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,128,288 (hereinafter referred as "Miya") in view of US Patent 5,983,113 (hereinafter referred as "Asanuma").

Regarding claim 26, Miya discloses a base station comprising:

(a) storing means (see Fig. 1, element 6) for storing phase difference information between a long period spreading code of a common control channel of said base station and a long period spreading code of a common control channel of a neighboring base station of said base station (see Fig. 1, col. 3, lines 58-64), the phase difference information being captured from a mobile station (see Fig. 4, col. 4, lines 60-67, wherein the radio receiver 32 receiving the signal (phase information) from a mobile station);

Miya does not disclose management means for managing the phase difference information stored in said storing means. However, Asanuma discloses management means for managing the phase difference information (see Figs. 1 and 3, col. 5, lines 56-67, and col. 6, lines 41-56). At the time of the invention, it would have been obvious to a person of ordinary skill in

the art to combine management means for managing the phase difference information teaching by Asanuma with Miya. The motivation for doing so would have been to provide to create timing control information for controlling the sensed phase difference read on column 2, lines 24-25. Therefore, it would have been obvious to combine Asanuma and Miya to obtain the invention as specified in the claim 26.

Regarding claim 27, Miya discloses a base station comprising:

(a) storing means (see Fig. 1, element 6) for storing phase difference information between a long period spreading code of a common control channel of said base station and a long period spreading code of a common control channel of a neighboring base station of said base station (see Fig. 1, col. 3, lines 58-64), the phase difference information being supplied from a control station of said base station (see Fig. 1, col. 3, lines 58-67, and col. 4, lines 1-3);

Miya does not disclose management means for managing the phase difference information stored in said storing means. However, Asanuma discloses management means for managing the phase difference information (see Figs. 1 and 3, col. 5, lines 56-67, and col. 6, lines 41-56). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine management means for managing the phase difference information teaching by Asanuma with Miya. The motivation for doing so would have been to provide to create timing control information for controlling the sensed phase difference read on column 2, lines 24-25. Therefore, it would have been obvious to combine Asanuma and Miya to obtain the invention as specified in the claim 27.

Regarding claim 28, Miya discloses a control station comprising:

(a) storing means (see Fig. 1, element 6) for storing phase difference information between a long period spreading code of a common control channel of a base station controlled by said

control station and a long period spreading code of a common control channel of a neighboring base station of said base station (see Fig. 1, col. 3, lines 58-64), the phase difference information being captured from said base station it controls (see Fig. 1, col. 3, lines 58-67, and col. 4, lines 1-3);

Miya does not disclose management means for managing the phase difference information stored in said storing means. However, Asanuma discloses management means for managing the phase difference information (see Figs. 1 and 3, col. 5, lines 56-67, and col. 6, lines 41-56). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine management means for managing the phase difference information teaching by Asanuma with Miya. The motivation for doing so would have been to provide to create timing control information for controlling the sensed phase difference read on column 2, lines 24-25. Therefore, it would have been obvious to combine Asanuma and Miya to obtain the invention as specified in the claim 28.

Allowable Subject Matter

6. Claim 30 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. Claims 22 and 31-33 are allowed.

Response to Remarks

8. Applicant's remarks with respect to claims above have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHIRIN SAM whose telephone number is (571)272-3082. The examiner can normally be reached on Increased Flexitime Policy (IFP) Program.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272 - 2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Respectfully submitted,

Date: October 10, 2008

By: /Phirin Sam/

Phirin Sam
Primary Examiner
Art Unit 2419